

at least one aperture in said walls;

a substantially planar skin disposed adjacent and substantially perpendicular to said walls; and

a projection extending beyond at least one perimeter portion of said walls.

Suitably, said projection is formed by a portion of said skin.

The skin may have a beveled edge. Preferably, the beveled edge is provided on at least two opposite edges of the skin.

Suitably, the panel may comprise a slot along a perimeter portion of the length and/or the width of the panel, said slot sized and shaped to receive said projection of an adjacent panel.

Suitably, said slot may lie partially or continuously along a length and/or width of the panel.

The skin preferably covers the same area as the panel, but is preferably offset relative to the panel.

Preferably, the cells have a square cross section, but may suitably be rectangular, hexagonal, circular, or any other desired shape.

Suitably, the walls and the skin are rigid.

Preferably, the apertures in the walls are aligned and are preferably adapted to facilitate the passage therethrough of reinforcing members, conduits, pipes, cables and the like.

Suitably, the panel may comprise perimeter walls, which together define a quadrilateral. Particularly, the perimeter walls together may define a rectangle.

Further features of the building panel will become apparent from the

detailed description.

In another form, the invention resides in a method of constructing a building structure in a particular orientation from a plurality of building panels, each building panel comprising:

- 5           a plurality of spaced apart walls forming a plurality of cells;  
            at least one aperture in each of said walls;  
            a substantially planar skin disposed adjacent and substantially perpendicular to said walls; and

- a projection extending beyond at least one perimeter portion of said  
10   walls;

said method including the steps of:

securing a first panel in said orientation; and

abutting a second panel against said first panel such that the projection of the first panel overlaps the second panel.

- 15           Suitably, a beveled edge of the skin of the first panel abuts against a beveled edge of the skin of the second panel. Alternatively, a slot of the second panel accommodates the projection of the first panel.

Preferably, the apertures in the walls of the first panel align with corresponding apertures in the walls of said second panel.

- 20           The method may further include the step of securing said first and second panels together with fastening means.

The method may further include the steps of securing a third and further panels to said first and/or second panels.

- 25           Preferably, the method further includes the step of routing one or more reinforcing members through the aligned apertures of said walls.

Suitably, the method further includes the step of filling at least one cell with settable material.

The method may further include the step of placing one or more inserts in one or more of the cells prior to filling the cells with settable material to prevent ingress of the settable material to said cell(s) containing the insert(s).

The method may further include the step of routing one or more conduits, pipes, cables or the like through the aligned apertures of the walls.

In another form, the invention resides in a method of constructing a building structure in a particular orientation from a plurality of building panels, each building panel comprising:

a plurality of spaced apart walls forming a plurality of cells;

at least one aperture in each of said walls;

a substantially planar skin disposed adjacent and substantially perpendicular to said walls; and

a projection extending beyond at least one perimeter portion of said walls;

said method including the steps of:

securing a first of said building panels in said orientation; and

securing a second of said building panels in said orientation spaced apart from said first building panel.

The method may further comprise the step of securing said second building panel such that said plurality of cells of said second panel face said plurality of cells of said first panel.

The method may further comprise the step of coupling said first and second building panels with reinforcing members.

CLAIMS:

1. A building panel comprising:

a plurality of spaced apart walls forming a plurality of cells;

at least one aperture in said walls; a substantially planar skin disposed

5 adjacent and substantially perpendicular to said walls; and

a projection extending beyond at least one perimeter portion of said walls.

- 10 2. The building panel of claim 1, wherein said projection is formed by a portion of said skin.

3. The building panel of claim 2, wherein the skin comprises a beveled edge.

- 15 4. The building panel of claim 3, wherein the beveled edge is provided on at least two opposite edges of the skin.

5. The building panel of claim 1, wherein the panel comprises a slot along a perimeter portion of the length of the panel.

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6. The building panel of claim 1, wherein the panel comprises a slot along a perimeter portion of the width of the panel.

- 25 7. The building panel of claim 1, wherein the panel comprises a slot along a perimeter portion of the panel, said slot sized and shaped to receive

said projection of an adjacent panel.

8. The building panel of claim 1, wherein the skin covers the same area as the panel, but is offset relative to the panel.

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9. The building panel of claim 1, wherein the cells have a cross section of one of the following shapes: square, rectangular, hexagonal, circular, other regular polygonal shape, other irregular polygonal shape.

- 10 10. The building panel of claim 1, wherein the walls and the skin are rigid.

11. The building panel of claim 1, wherein said panel is formed from plastics material.

- 15 12. The building panel of claim 1, wherein said panel is formed from metal.

13. The building panel of claim 1, wherein said panel is formed from aluminium.

- 20 14. The building panel of claim 1, wherein the apertures in substantially parallel walls are aligned.

- 25 15. The building panel of claim 1, wherein the apertures are adapted to facilitate the passage therethrough of one or more of: reinforcing members, conduits, pipes, tubes, rods, cables.

16. The building panel of claim 1, wherein the panel comprises perimeter walls, which together define a quadrilateral.

5 17. The building panel of claim 16, wherein the perimeter walls together define a rectangle.

18. A method of constructing a building structure in a particular orientation from a plurality of building panels, each building panel comprising:

10 a plurality of spaced apart walls forming a plurality of cells;  
at least one aperture in each of said walls;  
a substantially planar skin disposed adjacent and substantially perpendicular to said walls; and  
a projection extending beyond at least one perimeter portion of

15 said walls;

said method including the steps of:

securing a first building panel in said orientation; and  
abutting a second building panel against said first building panel such that the projection of the first building panel overlaps the second

20 building panel.

19. The method of claim 18, wherein a beveled edge of the skin of the first panel abuts against a beveled edge of the skin of the second panel.

25 20. The method of claim 18, wherein a slot of the second panel

accommodates the projection of the first panel.

- 5           21. The method of claim 18, wherein the apertures in the walls of the first panel align with corresponding apertures in the walls of said second panel.
22. The method of claim 18, further including the step of securing said first and second panels together with fastening means.
- 10          23. The method of claim 18, further including the steps of securing one or more further panels to said first and/or said second panels.
24. The method of claim 18, further including the step of routing one or more reinforcing members through aligned apertures of said walls.
- 15          25. The method of claim 18, further including the step of routing one or more of the following through aligned apertures of said walls: conduits, pipes, tubes, rods, cables.
- 20          26. The method of claim 18, further including the step of filling at least one cell with settable material.
27. The method of claim 18, further including the step of placing one or more inserts in one or more of the cells prior to filling the cells with
- 25          settable material to prevent ingress of the settable material to said

cell(s) containing the insert(s).

28. A method of constructing a building structure in a particular orientation from a plurality of building panels, each building panel comprising:

- 5                   a plurality of spaced apart walls forming a plurality of cells;  
                  at least one aperture in each of said walls;  
                  a substantially planar skin disposed adjacent and substantially  
                  perpendicular to said walls; and  
                  a projection extending beyond at least one perimeter portion of  
10                   said walls;

said method including the steps of:

- securing a first of said building panels in said orientation; and  
                  securing a second of said building panels in said orientation spaced  
                  apart from said first building panel.

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29. The method of claim 28, further comprising the step of securing said second building panel such that said plurality of cells of said second panel face said plurality of cells of said first panel.

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30. The method of claim 28, further comprising the step of coupling said first and second building panels with reinforcing members.

31. The method of claim 28, further comprising the step of introducing settable material in a space between said first and second panels.